



Bulletin of Popular Information

Vol. 35

April, 1960

No. 4

MULTIPLE-STEMMED TREES FOR SPECIAL LANDSCAPE INTEREST

So accustomed have we become to having our trees trained to a single stem or trunk that the idea of seeing them grown in any other way seems at first alien and unnatural. The effective ways in which landscape architects have made use of multiple-stemmed specimens has demonstrated however, not only their value in solving certain landscape problems, but also in adding special interest to ornamental plantings.

In considering the uses of multiple-stemmed trees, we find they serve a number of worthwhile purposes. Especially important is their ability to add basal weight to a planting area, thereby helping integrate a specimen plant more closely with its surroundings. As a focal point or accent, a tree clump can be used to excellent advantage, too, either by itself underplanted with a ground cover or incorporated into shrubbery groupings. Beside a doorway, at the corner of a building or as the principal subject in a courtyard planting a tree of this type would be equally appropriate. Modern architecture offers still another opportunity to put multi-trunked trees to good use, that of relieving the monotony of low, uninteresting roof lines.

Aesthetically the architectural framework of a tree grown as a several stemmed clump is as a rule infinitely more picturesque than a single trunked specimen, the individual stems in many instances assuming a pleasing irregularity of line. Removal of most of the smaller side branchlets along the lower two thirds of their length in the Japanese manner serves to further emphasize this character. The interesting shadows cast by irregular trunks must not be overlooked, either, whether projected to the ground or onto a wall. And, if by chance decorative bark, distinct either in color or texture is a characteristic, this feature adds further to the plant's desirability. It is obvious, of course, that floral, foliage and fruit interest is important at any time.

The size multiple-stemmed trees will attain depends upon the species involved, in some instances mature heights being reached. Our interest

in this study, however, is in the low and medium growing types, those whose scale is more appropriate to present day usage.

It is among the birches that we find multiple-trunked specimens most common. The triangular leaved Gray Birch, *Betula populifolia*, one of the lowest growing of the genus (to 25 ft.), occurs most frequently in this form. Notwithstanding the common name, its bark is just as white as that of the taller Canoe Birch, *Betula papyrifera*, (to 50 ft.), though conspicuously marked with black triangles extending downward below the branch intersections. The bark of the Canoe or Paper Birch lacks the latter, but tends to peel in paper thin sheets. Both trees have attractive summer foliage and clear gold autumn color. Very similar in appearance is the European Birch, *Betula pendula* (syn. *alba*.), a tree to 60 ft. Unfortunately it is more susceptible to damage by the bronze birch borer. In the Red or River Birch, *Betula nigra*, a waterside species which ranges far into the south, will be found another ornamental whose shaggy bark is light reddish brown or tan in color. The aromatic twigged Sweet or Cherry Birch, *Betula lenta*, another inhabitant of low wet woods commonly develops several stems, supporting a pyramidal foliage canopy. Its shaggy bark is silvery brown, lustrous like cherry.

The Dogwood clan likewise includes a number of possibilities, of which *Cornus florida*, the Flowering Dogwood, is most spectacular. Everyone is acquainted with the beauties of this picturesque small tree with its pleasing tiered branches, showy white flowers, bright red fruit and brilliant autumn color. Demanding special care in this area, however, it is not a plant to be used indiscriminately. The same general effect may be achieved by planting the Pagoda Dogwood, *Cornus alternifolia*, a hardy species with small creamy flowers in flat cymes, blue fruit on bright red pedicels and purplish red autumnal foliage color. Round headed *Cornus controversa*, the Giant Dogwood from China and Japan is a taller growing, equally decorative small tree of pleasing configuration. Exfoliating brown bark is a characteristic of the Japanese Corneliancherry Dogwood, *Cornus officinalis*, tall multiple-stemmed shrub or small tree (to 20 ft.) whose branches are at the moment studded with fat round buds soon ready to break into yellow flowers. In addition to the precocious bloom its excellent lustrous green summer foliage and edible oblong red fruit are noteworthy.

Among our native trees no group illustrates the multiple-stemmed characteristic more effectively than the hawthorns. With something of interest to offer throughout the season, we may admire their white flowers borne in successive waves during May and into early June, their umbrella-like canopies of summer foliage and their often showy autumnal fruit displays. It is during the dormant season, however, that their distinctive architectural framework is most clearly revealed in the form of shapely contour, pleasing delineation and varied texture. The Dotted Hawthorn, *Crataegus punctata*, is the widest spreading, most horizontally branched species of them all, but just as desirable from a landscape standpoint is

the Cockspur Thorn, *Crataegus crus galli*, a more round-headed species with lustrous foliage, slender spines and persistent wine colored fruit. The lesser known Lavalley Hawthorn, *Crataegus lavalleyi*, is also worth mentioning as a several stemmed species combining shapeliness of form with decorative flowers, brick red fruit and leathery leaves. The upright growing Washington Thorn, *Crataegus phaenopyrum*, (syn. *cordata*) is another subject not to be overlooked.

Flowering Crabapples make handsome clump trees, too, although unlike the hawthorns they must usually be trained to grow in this manner. Profuse flowering, persistent fruited Japanese Zumi Crabapple, *Malus zumi calocarpa* (to 25 ft.), is one of the best for both flowers (white) and fruit (red or yellow), but the lower growing (to 15 ft.) Arnold, *Malus arnoldiana*, and Carmine Crabs, *Malus atrosanguinea*, to mention a few, are also quite picturesque. The former has long stemmed deep pink buds opening into almost white flowers, the latter carmine buds and small rose colored blooms. Our native Prairie Crab, *Malus ioensis*, a tree inclined to grow in thickets is sometimes multi-stemmed. This is the very sweet scented species with salmon pink buds opening into soft pink flowers.

The Juneberries, Shadblows or Serviceberries (*Amelanchiers*) include some of the best trees in the multiple-stemmed category, among them the erect Downy Shadblow, *Amelanchier canadensis* (to 35 ft. or more) with ivory colored flowers, downy new foliage and smooth gray bark, the lower growing (to 25 ft.) Allegheny Shadblow, *Amelanchier laevis*, with white flowers and bronze tinted new foliage, and the Snowy Shadblow, *Amelanchier grandiflora* (to 15 ft.), handsome hybrid of spreading horizontal growth. The flowers of the latter, which appear in drooping racemes, are larger, whiter and later than those of the others. All have edible blue black fruit in June, orange terra cotta fall color and attractive smooth gray bark.

The growth habits of several of the Magnolias also indicate their possibilities as structurally interesting subjects. The rose pink flowered, light gray barked Saucer Magnolia, *Magnolia soulangeana*, often occurs as a several trunked tree, as does the earlier flowering, lower growing Star Magnolia, *Magnolia stellata*, and the Purple Lily Magnolia, *Magnolia liliiflora nigra*. The latter is late blooming (mid May), producing deep purple flowers of classic line. Being more tender than some, it likes a sheltered location. Notwithstanding its Southern origin, the handsome Sweet Bay Magnolia, *Magnolia virginiana*, (syn. *glauca*), having proved hardy at the Arboretum, is another subject producing several main stems. Small, but very fragrant cup shaped flowers in June and July, decorative red seeded fruits and handsome semipersistent foliage constitute its chief attractions.

Multiple trunks are characteristic of a number of the maples, including the tall, fast growing Silver or Soft Maple, *Acer saccharinum* and the always attractive Red or Swamp Maple, *Acer rubrum*. Of the lower types

the Amur Maple, *Acer ginnala*, is almost always several trunked with an interesting branch structure and rounded head. The elongated central lobes of its leaves and their spectacular purplish red autumn coloring are outstanding. In well drained, protected planting sites it is also possible to enjoy the beauties of the shaggy Paperbark Maple, *Acer griseum*, whose trunks are covered with handsome cinnamon brown bark which rolls back to reveal the lighter, smoother inner covering. The picturesque Bloodleaf Japanese Maple, *Acer palmatum atropurpureum*, is another 'special care' plant showing in the line of its main trunks and branches an oriental feeling. Its foliage is reddish purple.

A number of other trees of various genera have equal or superior value as multi-trunked specimens. To name a few of the taller growers we may cite the American Linden or Basswood, *Tilia americana*, a tree with a predisposition to sprouting at the base of the trunk, the native wild Black and Pin Cherries, *Prunus serotina* and *Prunus pennsylvanica*, the latter known for its shiny reddish brown bark, the picturesque European Alder, *Alnus glutinosa*, waterside species with decorative catkins and rich green foliage, gray trunked Aspen, *Populus tremuloides*, gregarious tree with trembling foliage and golden fall color and the London Plane, *Platanus acerifolia*, European cousin to our native Sycamore. Its bark is olive green, however, exfoliating to reveal lighter inner color.

Trees more appropriately scaled to the uses we have suggested for them should by all means include the slow growing Sour Gum, Tupelo or Pepperidge, *Nyssa sylvatica*, native tree of exceptional picturesqueness. Like the conifers it has an excurrent trunk from which the branches extend horizontally at unequal lengths. With age they tend to droop gracefully. The glossy green leaves take on superb scarlet and purplish tones at the end of the growing season highlighting the autumn scene with their brilliance. Equally picturesque is the Sassafras, *Sassafras albidum*, gregarious tree of distinctive habit of growth (horizontal branches, upturned branchlets), with leaves of unusual shape (three or more variations commonly found on the same tree), burnt orange or scarlet fall color and olive green twigs. It is likewise characteristic of the Redbud, *Cercis canadensis*, to develop multiple trunks of irregular line, trunks whose dark bark is most conspicuous. The Redbuds rose pink pea-shaped flowers are as much a part of the spring scene as are its clear yellow heart shaped leaves in the fall. Another lesser known native, a plant of the woodland understory, serves as one of the best multiple-trunked subjects for planting in shade. This is the irregularly branched American Hornbeam or Blue Beech, *Carpinus caroliniana*, small tree with smooth gray "muscular" bark and decorative catkins, foliage and seed clusters. The burnt orange fall color is striking. Although a moisture lover, it tolerates drier locations surprisingly well. In the Japanese Tree Lilac, *Syringa amurensis japonica*, will be found still another desirable ornamental. Tending to develop numerous stems, conspicuous by reason of their shiny brown cherry-like bark, it eventually attains a height of 20 ft.

or so. Rather large leaves with an inclination to droop and immense panicles of feathery, creamy white flowers in late June or early July further set it apart. Not quite as tall, but in every way a splendid landscape subject, is the Common Witchhazel, *Hamamelis virginiana*, a plant contributing an interesting form, good looking foliage turning clear yellow in fall and very late (Oct.-Nov.) strap shaped, yellow flowers. Fine for shade.

Among other small deciduous trees which may in certain instances be appropriate for multiple-stemmed use may be mentioned the coarse, thorny, stiff branched Devils Walking Stick, *Aralia spinosa*, the Japanese Katsura Tree, *Cercidiphyllum japonicum*, almost always multi-trunked, the American Smoke Tree, *Cotinus americanus*, the dainty, spring flowering Silverbell, *Halesia carolina*, and the July flowering (yellow) Golden-rain Tree, *Koelreuteria paniculata*.

Of the several coniferous trees in this classification, belongs the Japanese Umbrella or Tanyosho Pine, *Pinus densiflora umbraculifera*, a small (to 20 ft.) tree whose irregularly spreading, brownish red trunks support a very picturesque, flat topped or umbrella shaped head. A slow growth rate is its one disadvantage. The more familiar Mountain Pine, *Pinus mugo*, from Central Europe to the Balkans, although quite variable in habit usually remains less than 10 or 12 ft. in height, a neat, round headed plant with many stems. Several trunks often characterize the hemlocks, *Tsuga*, too, graceful fine textured trees for shade.

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Published monthly by The Morton Arboretum, Lisle, Ill. Subscription \$1.00 a year; single copies 10c; double copies 20c



American Hornbeam or Blue Beech, *Carpinus caroliniana* L., handsome multiple-trunked small tree for use in shade.